

System

These RF receivers are compatible with both code hopping and fixed-code transmitters (see page 4 of this manual for a list of compatible transmitters). They can be used for a variety of applications, such as allowing the same transmitter to arm/disarm a vehicle alarm and open/close a garage door opener. The receivers come in one- or two-channel versions. Each channel can learn the codes of up to 15 different transmitter buttons on a first-in, first-out basis.

Installation Notes

1. Mount out of sight in a location where it is not surrounded by metal, and where it is not exposed to the weather or moisture. Metal will block the RF signal, resulting in a reduced range.
2. For best range, pull the antenna wire as long and straight as possible. If the receiver receives interference from local RF activity (eg., airport or military base), the antenna wire can be folded. **DO NOT CUT THE ANTENNA WIRE.**

Learning a New Button Code (channel 1)

1. Press mode switch #1 for three seconds. The green LED will start to flash quickly.
2. While the green LED is flashing quickly, press a button on a compatible transmitter. The green LED will flash once and then turn off to show that that button was learned.
3. Repeat steps 1 and 2 to learn more buttons into channel 1.

NOTE — The green LED will flash a maximum of 15 seconds. If no transmitter button is pressed during this time, the receiver will exit the code-learning mode, and the green LED will turn off.

Learning a New Button Code (channel 2)

The procedure is the same as for channel 1, except mode switch #2 initiates the code-learning process, and the red LED shows status.

Note Regarding Code Learning

1. The receiver will only learn the code of a particular button once. Once a button's code is learned, if you try to code-learn that button again, whether it is for the same channel or not, the receiver will exit code learning mode.
2. Each channel can learn the codes of a maximum of 15 transmitter buttons. If you attempt to learn a sixteenth button, the earliest code learned will be deleted.
3. To clear all codes — Press the appropriate mode switch (#1 or #2) for three seconds. When the LED starts flashing, press that switch again for three seconds. The LED flashes twice to indicate that all codes associated with that channel are now deleted.

Programming Relay Output Modes

The relay output(s) can be programmed for one of four different modes, depending on the application:

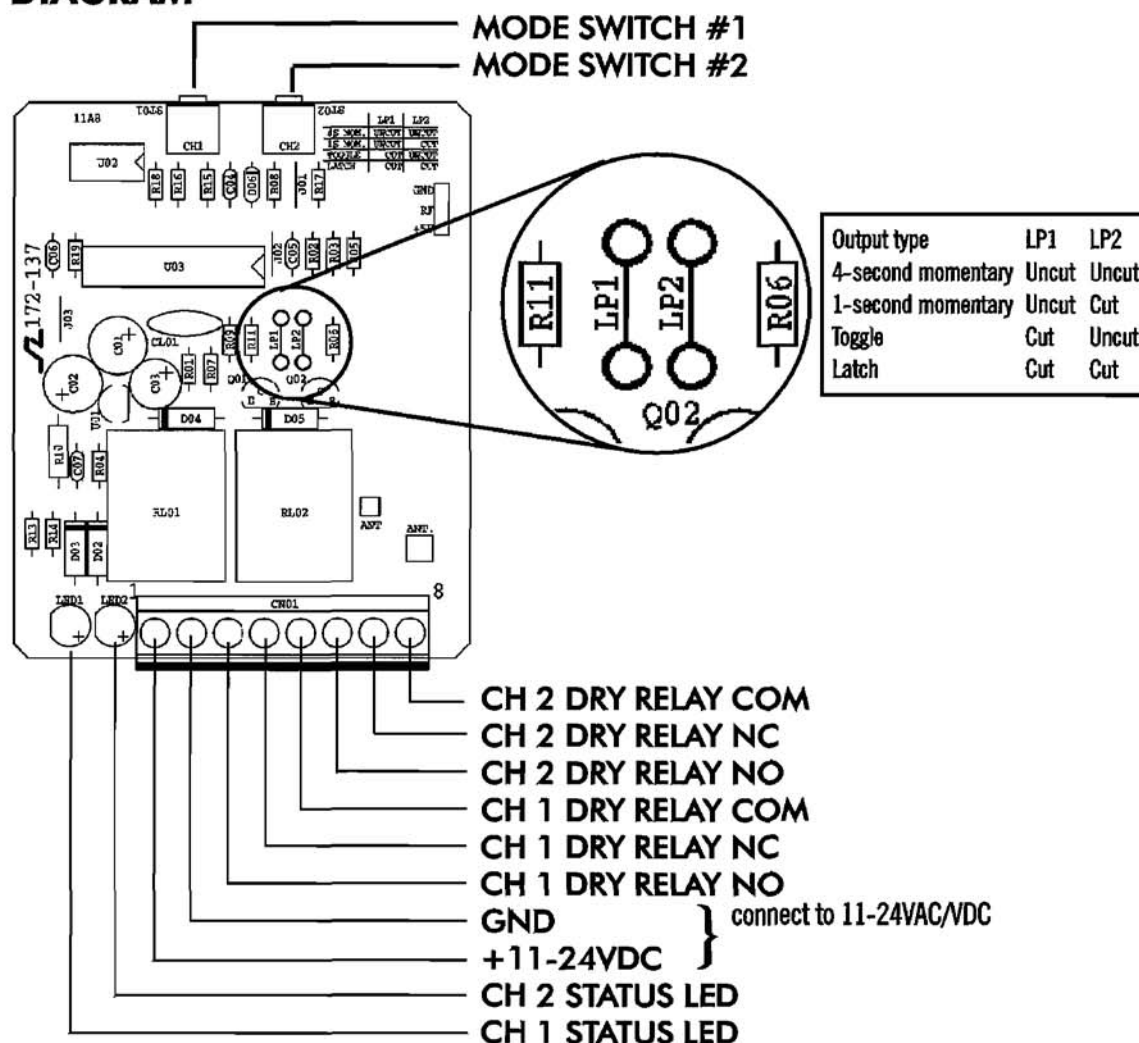
- 4-second momentary — Press the transmitter button once. The relay turns on for 4 seconds, and then turns off. (This is the DEFAULT mode)
- 1-second momentary — Press the transmitter button once. The relay turns on for 1 second, and then turns off.
- Toggle — Press the transmitter button once, and the relay turns on. Press a compatible transmitter button again, and the relay turns off.
- Latch — Press the transmitter button once, and the relay turns on and stays on. The relay will remain on until the appropriate mode switch (#1 or #2) is pressed to reset, regardless of whether a compatible transmitter button is pressed again or not.

To program outputs, open case and find the 2 jumpers marked LP1 and LP2. Cut these jumpers, if needed, as follows:

Output type	LP1	LP2
4-second momentary	Uncut	Uncut
1-second momentary	Uncut	Cut
Toggle	Cut	Uncut
Latch	Cut	Cut

NOTE — On the 2-channel models, the output mode of both relays is the same. In other words, you cannot have 4-second momentary output for channel 1 and latch output for channel 2.

DIAGRAM



Mode Switch Operation (one per channel)

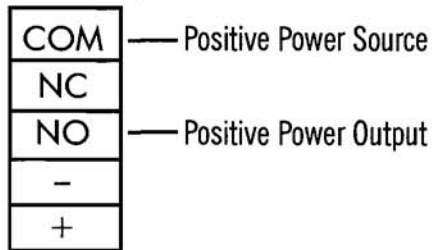
- Learn mode — Press and hold the switch for three seconds.
- Clear memory — Press three seconds, then when the LED starts flashing, press again for three seconds to delete all previously learned codes.
- Reset latched output — If this channel was programmed for latch output, once the relay is turned on with a transmitter button, press the mode switch to turn the relay off.
- Memory Display — Press and release the mode switch to show number of codes stored. LED will flash a number of times to correspond to the number of codes stored.

LED Indication (one per channel)

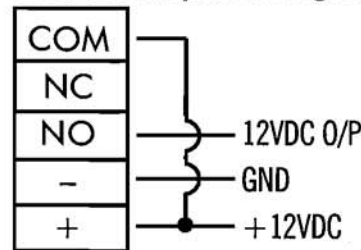
- Steady on — Senses signal from a transmitter button whose code was already learned.
- Fast flash — In the code-learning mode.
- One flash — A transmitter button code was learned.
- Two flashes — All previously learned transmitter button codes were deleted.

Typical Applications:

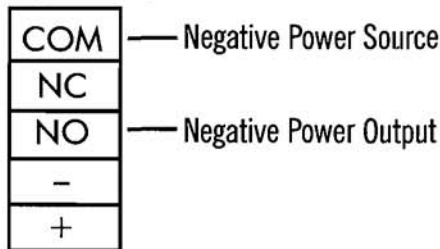
Positive Output:



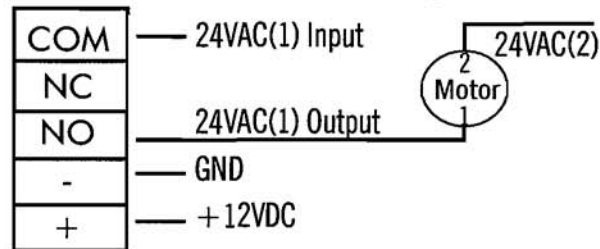
12VDC receiver power driving a 12VDC appliance:



Negative Output:



12VDC receiver power input, 24VAC output driving a motor



General Specifications

Operating Frequency:	315 MHz 433.92 MHz
Memory Capacity:	15 transmitter button codes per channel
Operating Voltage:	11VDC ~ 24VDC or 11VAC ~ 24VAC 5VDC ~ 13VDC
Operating Current:	8 mA @ 12VDC (standby) 30mA/channel @ 12VDC (activated) 70mA @ 6VDC (activated),
Relay Contact Rating:	Form 'C' type; 10A @ 24VDC or 120VAC per channel
Connectors:	Screw Terminals, +, -, with N/O, N/C, and COM per channel
Dimensions:	3.25" x 2.7" x 1.1" (83 x 68 x 27.5 mm)

Compatible Transmitters

315 MHz

1-button, Fixed Code
2-button, Fixed Code
3-button, Code Hopping
2-button, Code Hopping

433.92MHz

1-button, Fixed Code
2-button, Fixed Code
2-button, Code Hopping
3-button, Code Hopping